

ABSTRACT OF THE INVENTION

[0156] The present invention relates to methods for modulating the migratory activity of cells expressing CD38 for the treatment of disorders including, but not limited to, inflammation, ischemia, asthma, autoimmune disease, diabetes, arthritis, allergies, infection with pathogenic organisms and transplant rejection. Such cells include, for example, neutrophils, lymphocytes, eosinophils, macrophages and dendritic cells. The invention further relates to drug screening assays designed to identify compounds that modulate the ADP-ribosyl cyclase activity of CD38 and the use of such compounds in the treatment of disorders involving CD38 modulated cell migration. The invention is based on the discovery that CD38-ADP-ribosyl cyclase activity is required for chemotaxis. Furthermore, the invention relates to methods for identifying compounds that modulate the enzyme activity of the *S. mansoni* CD38 homologue and using those compounds in the treatment of pathologic disorders caused by helminth infection. This is based on the discovery that helminths such as *S. mansoni* express CD38 homologues.